September 13, 1961

Dr. Fred Bergmann
National Institute of Dental Research
National Institutes of Health
Bethesda 14, 1961

Dear Fred,

I'm very happy to hear that things are going well for you in Bethesda. I spoke to several of your colleagues in Europe this summer and they all told me about how pleased they were to have you around and about what a nice guy you are. Of course my answer was that if he came from this lab, he has to be good!

I have not yet read the article by Bowman and Svenson in Nature, although I think I know what it's about. I want to study it some more. I think it's wonderful that you'll go back for your second look at some of the funny things about amino acyl RNA synthetases. I hope you will keep me in touch with anything you find.

Enclosed are your notes on the B. megatherium experiments. I think it is important that you repeat these experiments - they are very closely related to the recent experiments of Seymour Benzer in which he has tested the specificity of the synthetases from different sources with the acceptor RNA preparations from different sources. He finds that depending on the amino acid source, enzymes will not react with RNA preparations from another source. This seems to be analogous to the findings of the purified B. megatherium enzyme which failed to incorporate amino acids onto coli RNA (was it just coli RNA which failed to act as acceptor?). In any case, Benzer's paper should be out soon in PNAS. I hope you will keep me informed as to how things are going since I'm very interested in the subject and also in your progress.

Reprints of our past papers are on their way to you, but having gone as printed matter may take a little longer to reach you.

The cells we have been using for the isolation of acceptor RNA have been grown in continuous exponential phase in the Bactogen and these have given us somewhat higher yields of RNA than that described in our paper. I don't really know about the S-RNA content of older cells. You may remember, however, that we used to isolate the S-RNA from the Iowa cells and this

seemed to be reasonably good. Our present difficulties with using these preparations comes from carrying over more DNA into the final product. This doesn't seem to be a problem with the exponentially grown cells.

I saw Jim several times in Europe this summer - in Strasburg and in Moscow. We spent several hours reminiscing and talking. I was happy to see how much he has progressed since leaving St. Louis. There's some chance that he will be coming to the N.I.H. this fall, possibly to work with Martha Nirenberg. Jim is doing some very pretty work and he seems to be quite happy.

Marianne spent part of the summer with us in Europe and now she's at Cologne in Delbruck's new Institute of Microbiology. We just got back a day or so ago and I'm trying to get out from under all the things which accumulated during my absence.

Best regards from everyone here to you and I hope we'll hear from you again soon.

Sincerely,

Paul Berg

PB:cm